

**Statement of Basis**  
**Proposed DRAFT December 16, 2005**  
**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT**  
**NO. CA 0049675**

Permittee's Name: Buena Vista Rancheria, Flying Cloud Casino

Mailing Address: P.O. Box 162283  
Sacramento, CA 95814

Plant Location: 4650 Coal Mine Road  
Ione, CA 95640

Contact Person Rhonda Pope, Tribal Chairperson  
(916) 491-0011

**I. Status of Permit**

This is a new permit application for a facility to be constructed. This is classified as a minor permit.

**II. General Information**

The Flying Cloud Casino will be located on a 67 acre Rancheria located in Amador County, CA approximately 4 miles south of the town of Ione.

**III. Facility Information**

The waste water treatment plant (WWTP) will serve a casino with approximately 56,000 square feet of gaming. Wastewater generated from the casino includes sewage, restaurant washwaters, and miscellaneous wastewater from guest support services. The WWTP will not serve residential connections, and will not accept wastewater from any industrial facilities.

The 67 acre site is relatively flat at the northern end with elevations rising several hundred feet towards the middle of the property. The site contains an area of historic archaeological and cultural significance. An archaeological survey has been conducted to determine the extent of the area.(Archaeological Inventory of the Buena Vista Rancheria, Amador County, Oct, 2005). An archaeological resource protection area has been established around this area. No construction or casino-related activities will disturb the archaeological resource protection area.

A natural spring is located in the higher elevations of the site, which drains to a pond and then drains to the east of the site where it flows and apparently disperses onto the adjacent property. The spring and existing pond will not be affected by construction or casino-related

activities.

A 2.8 acre jurisdictional wetland is located in the northwest corner of the site, adjacent to Coal Mine Road on the western boundary of the property. During the site inspection, the wetland was observed to drain into a culvert that flowed under coal mine road. The culvert dropped approximately 5 feet from the elevation of the wetland. There appeared to be a berm separating the wetland area from a shallow drainage canal alongside the road that drained into the culvert. Because it was raining at the time of the site visit, the wetland was observed to be overflowing the berm and draining into the culvert.

The WWTP is anticipated to have an average annual flow of 120,000 gallons per day (GPD). However, the projected flows at a casino facility may differ significantly from weekday to weekend, and the facility projects an average weekend flow of 180,000 gpd, with an contingency capacity for 230,000 gpd. The facility has therefore been designed for a peak weekend flow of 350,000 gpd. Note that the application states a design flow of 250,000 gpd, but this design flow has been updated since the application was submitted.

Wastewater from the casino will be treated through an immersed membrane bioreactor (MBR) treatment system. The permit application describes an MBR system as a tertiary system similar to an activated sludge treatment plant. The MBR is operated at a higher solids concentration than conventional activated sludge systems, which make it appropriate for treating high strength wastewater with varying flows that are typical of wastewaters produced by a casino operation.

The treatment system at the Flying Cloud Casino will consist of a passive oil/water separator to treat oil and grease. This is in addition to active grease interceptors that will be located at restaurant kitchens within the casino. At the headworks, wastewater will be screened by a fine screen (2 mm) stainless steel bar screen with a conveyor/washer/compactor. The fine screening of large particulate matter is necessary to protect the membrane from large particles. Solids from the screen will go to a compactor and disposed at an off-site landfill. The headworks area will be covered to control odors.

Wastewater will flow to one 32,600 gallon equalization/anoxic tank. An additional equalization basin is available (77,300 gallons) that will be used for additional storage if necessary. There will be a mixer of the anoxic/denitrification basin. Wastewater then flows to 2 parallel aeration basins (57,600 gallons each) where a fine bubble diffuser system will be used to aerate the tank with an average daily residence time of approximately 24 hours. The wastewater then flows to 2 parallel membrane basins (21,800 gallons each).

Membrane filters are suspended in the MBR tanks and a slight vacuum is applied to pull clear effluent through the membranes. The membranes replace the clarifier and filter used in conventional tertiary treatment plants. The pore size of membranes (0.1 to 0.4 microns) is small enough so that coliform bacteria do not pass through, eliminating the need for conventional disinfection. A constant source of coarse bubble scour air is applied at the bottom of the

membrane cassettes to remove solids that might accumulate between and on the surface of the membrane.

Mixed liquor from the membrane basins will be recirculated from the aeration basin to the anoxic basin at a rate of approximately 4 to 1. In case of excess flows, maintenance or emergency, overflow from the system will flow to 2 emergency overflow basins adjacent to the pre-aeration and MBR basins (57,600 and 21,800 gallons capacities respectively).

Membranes are cleaned typically every 15 minutes to 1 hour by using a relaxation mode that lasts for 1-2 minutes. Sodium hypochlorite will be added approximately twice per year at a concentration of 0.5% to the backflow to inhibit biogrowth in the membranes.

Solids removed from the fine screen and MBR sludge line will be sent to a filter press and then sent off site to a landfill.

Final effluent will be disinfected through UV disinfection consisting of 2 UV units in parallel.

The casino anticipates that approximate 30 % of treated effluent will be recycled and re-used at the casino. Recycle uses include irrigation and non-potable uses in the casino such as toilet flushing. Final effluent designated for reuse will be chlorinated and sent to a recycle water storage tank. The storage tank will contain baffle walls to double as the chlorine contact chamber.

Stormwater runoff from the WWTP area will be collected and directed back to the WWTP. Therefore, the facility does not expect to obtain coverage under the multi sector general stormwater permit.

#### **IV. Receiving Water**

The effluent from the WWTP is expected to run for approximately ½ mile through a drainage located on the Rancheria. The existing drainage appears to be a partially constructed, partially natural channel that runs alongside Coal Mine Road. The existing drainage runs adjacent to the road and, at the northerwestern boundary of the property, adjacent to the wetlands area but separated by a small soil berm, and then flows into a drain under Coal Mine Road to an unnamed tributary to Jackson Creek, which subsequently flows into Dry Creek and to the lower Mokelumne River.

The Tribe does not have approved water quality standards for discharges to waters located on the Buena Vista Rancheria. However, the discharge of wastewater from the WWTP flows to a tributary of the Mokelumne River (via Dry Creek and Jackson Creek), for which the State of

California has established water quality standards. Therefore, water quality standards applicable to the Mokelumne River (Camanche Reservoir to Delta) and its tributaries are applicable to the discharge, and EPA has applied water quality standards based on the (Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins - Fourth Edition - 1998", as adopted by the Central Valley Regional Water Quality Control Board and hereafter referred to as the Basin Plan.

The Basin Plan on page II-2.00 states: "Existing and potential beneficial uses which currently apply to surface waters of the basin plan are presented in Figure II-1 and Table II-1. The beneficial uses of any specifically identified water body generally apply to its tributary streams". There are no specifically identified beneficial uses for the tributaries of Dry Creek. Therefore, the beneficial uses designated for Jackson Creek are those that apply to the Mokelumne River from Camanche Reservoir to the Delta and are listed as : Agricultural supply (AGR), Water Contact Recreation (REC-1), Non-contact Recreation (REC-2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or early Development (SPWN) and Wildlife Habitat (WILD). Additionally, the California State Water Resources Control Board Resolution 88-63, incorporated into the Basin Plan pursuant to Regional Board Resolution 89-056, requires that municipal and domestic supply (MUN) use be applied to surface water bodies that do not have beneficial uses listed in Table II-1. Therefore, MUN also applies to tributaries to the Mokelumne River.

## **V. Description of Discharge**

The discharge will be tertiary treated municipal wastewater. Disinfection will be by UV disinfection prior to discharge.

The permit application lists the following design parameters for the new treatment system:

Pollutant or parameter	Influent Concentration	Effluent Concentration
BOD5	450-600 mg/L	<10 mg/L
TSS	450-600 mg/L	<10 mg/L
Total Nitrogen	N/A	<10 mg/L Total Nitrogen
NH4-N	N/A	< 2 mg/L NH3-N

## **VI. Regulatory Basis for NPDES Permit Effluent Limitations**

Section 301(a) of the Clean Water Act provides that the discharge of any pollutant to waters of the United States is unlawful except in accordance with an NPDES permit. Section 402 of the

Act establishes the NPDES program. The program is designed to limit the discharge of pollutants into waters of the U.S. from point sources (40 CFR 122.1 (b)(1)) through a combination of various requirements including technology-based and water quality-based effluent limitations.

#### Technology-based effluent limitations

Under 40 CFR Part 125.3(c)(2), Technology based treatment requirements may be imposed on a case-by-case basis under Section 402(a)(1) of the Act, to the extent that EPA promulgated effluent limitations are inapplicable, i.e., the regulation allows the permit writer to consider the appropriate technology for the category or class of point sources and any unique factors relating to the applicant.

The minimum levels of effluent quality attainable by secondary treatment for Settleable Solids, as specified in the EPA Region IX Policy memo dated May 14, 1979, are listed below:

30-day average - 1 ml/l  
Daily maximum - 2 ml/l

The minimum levels of effluent quality attainable by secondary treatment for Biological Oxygen Demand (BOD), Total Suspended Solids (TSS), and pH, as defined in 40 CFR 133.102, are listed below:

#### BOD:

##### Concentration-based Limits

30-day average - 30 mg/l  
7-day average - 45 mg/l  
Removal Efficiency - minimum of 85%

##### Mass-based Limits

30-day average - (30 mg/l) (0.180 mgd) (8.34 conversion factor) = 45 lbs/day  
7-day average - (45 mg/l) (0.180 mgd) (8.34 conversion factor) = 68 lbs/day

#### TSS:

##### Concentration-based Limits

30 - day average - 30 mg/l  
7 - day average - 45 mg/l  
Removal efficiency - Minimum of 85%

##### Mass-based Limits

30-day average - (30 mg/l)(0.180 mgd)(8.34 conversion factor) = 45 lbs/day

7-day average - (45 mg/l) (0.180 mgd) (8.34 conversion factor) = 68 lbs/day

pH:

Instantaneous Measurement: 6.0 - 9.0 standard units (s.u.)

## 2. Water Quality-Based Effluent Limitations

Sections 402 and 301(b)(1)(C) of the Clean Water Act require that the permit contain effluent limitations to meet water quality standards. 40 CFR 122.44(d) provides that an NPDES permit must contain:

“Water quality standards and State requirements: any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards under sections 301, 304, 306, 307, 318 and 405 of CWA necessary to:

(1) Achieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality.”

40 CFR 122.44 (d)(1)(i) states:

“Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.”

40 CFR 122.44 (d) (1) (ii) states:

“When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and non-point sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity) and where appropriate, the dilution of the effluent in the receiving water.”

40 CFR 122.44 (d) (1) (iii) states:

“When the permitting authority determines using the procedures in paragraph (d) (1) (ii) of this section, that a discharge causes, has the reasonable potential to cause or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant.”

Guidance for the determination of reasonable potential to discharge toxic pollutants is

included in both the Technical Support Document for Water Quality-Based Toxics Control (TSD) - Office of Water Enforcement and Permits, U.S. EPA, dated March 1991 and the U.S.EPA NPDES Permit Writers Manual - Office of Water, U.S. EPA, dated December 1996. EPA's technical support document contains guidance for determining the need for permit limits. In doing so, the regulatory authority must satisfy all the requirements of 40 CFR 122.44(d)(1)(ii). In determining whether the discharge causes, has the reasonable potential to cause or contributes to an excursion of a numeric or narrative water quality criterion for individual toxicants, the regulatory authority must consider a variety of factors. These factors include the following:

- Dilution in the receiving water,
- Existing data on toxic pollutants,
- Type of industry,
- History of compliance problems and toxic impacts,
- Type of receiving water and designated use.

Therefore, based on WWTP operations and projected waste water quality data provided in the application, EPA conducted a "reasonable potential" analysis to compare effluent discharges to water quality standards, as required by 40 CFR 122.44(d)(1)(ii), (iii) and (iv).

A. Dilution in the receiving water

Discharge from Outfall 001 is to an unnamed tributary to Jackson Creek. Jackson Creek has no natural flow during certain times of the year. Therefore, no dilution of the WWTP effluent has been considered in the development of effluent limits.

B. Existing data on toxic pollutants

This is a new discharge and therefore no discharge of effluent has been reported during the previous permit term and therefore there is no data on toxic pollutants.

The new treatment plant is designed to meet the following effluent concentrations:

BOD5 < 10 mg/l  
TSS < 10 mg/l;

The WWTP will not serve any residential customers, and most all flows originate from sanitary uses at the casino. No industrial sources will discharge to the WWTP, although there will be a restaurant in the casino. The permittee will be required to conduct a full scan of priority pollutants within 90 days of discharge from the new treatment plant and in the 3rd and 5th year thereafter. Reasonable potential will be re-evaluated at this time and the permit may be re-opened to incorporate new water quality based limits as necessary.

C. Type of Industry

Typical pollutants of concern in untreated and treated domestic wastewater include ammonia, nitrate, oxygen demand, pathogens, temperature, pH, oil and grease, and solids. Chlorine and turbidity may also be of concern due to treatment plant operations.

D. Receiving Water

As described in Section IV of this Statement of Basis, numeric water quality standards that apply to tributaries of the Mokelumne River are:

AGR, REC-1, REC-2, FW HABITAT-WARM/COLD, SPWN-WARM/COLD, WILD and MUN.

No effluent data is available for the discharge from the Permittee, therefore, EPA evaluated typical pollutants and applicable water quality standards to protect the beneficial uses of the receiving water.

E. Rationale for Effluent Limitations

EPA evaluated the typical pollutants expected to be in WWTP discharge effluent and selected the most stringent of applicable technology-based standards or water quality-based effluent limitations. Where effluent concentrations of toxic parameters are unknown or are not reasonably expected to be discharged in concentration that have the reasonable potential to cause or contribute to water quality standards, EPA has established monitoring requirements in the permit. This data will be re-evaluated and the permit re-opened to incorporate effluent limitations if necessary.

*Ammonia*

Treated and untreated domestic wastewater may contain levels of ammonia that are toxic to aquatic organisms. Ammonia is converted to nitrate during biological nitrification process, and then nitrate is converted to nitrogen gas through biological denitrification process. USEPA's Ambient Water Quality Criteria for the Protection of Freshwater Aquatic Life recommends acute and chronic criteria that are pH and temperature dependent. Due to the potential for ammonia to be present in sanitary wastewater at toxic levels and due to the conversion of ammonia to nitrate, effluent limitations are established for ammonia.

*Nitrate*

Treated and untreated domestic wastewater may contain levels of ammonia that are toxic to aquatic organisms. Ammonia is converted to nitrate during biological nitrification process, and then nitrate is converted to nitrogen gas through biological denitrification process.



The primary MCL for protection of MUN is 10 mg/L and the USEPA Ambient Water Quality Criteria for the Protection of Human Health is also 10 mg/L for non-cancer effects. Due to the potential for ammonia to be present in sanitary wastewater and due to the conversion of ammonia to nitrate, effluent limitations are established for nitrate (measured as N).

*Total Dissolved Solids/Electrical Conductivity*

To protect the beneficial uses of water for agriculture uses, studies by the United Nations have recommended a goal of 700 umhos/cm<sup>1</sup>. The California Department of Health Services has recommended an SMCL for EC of 900 umhos/cm, with an upper level of 1600 umhos/cm and a short term level of 2200 umhos/cm.

Due to lack of discharge data, it is unknown at this time if the discharge from the new WWTP will have the reasonable potential to cause or contribute to an exceedance of water quality standards. Due to previous studies conducted by the RWQCB on the origin of dissolved solids impairment, it is unlikely that the WWTP will be a significant contributor of dissolved solids. Therefore, the draft permit establishes monthly monitoring requirements for EC and TDS to assess reasonable potential.

*pH:*

The basin plan requires that a pH of 6.5-8.5 must be met at all times and that changes in normal ambient pH level not exceed 0.5 units. This is more stringent than technology based requirements for pH, therefore, this limit is included in the permit.

*Fecal Coliform:*

Based on the nature of WWTP effluent, there is a reasonable potential for fecal coliform to violate water quality standards. Based on REC-1 Beneficial Use fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed 200/100 ml, nor shall more than 10% of the total number of samples during any 30-day period exceed 400/100 ml - 10% of samples for 30-day period. Based on MUN standards, fecal coliform must not exceed 2.2 /100mL in a 7 day average. Since the MUN is the most stringent standard, this limit is included in the permit.

The effluent is designed to meet California (Title 22) disinfection standards for the re-use of wastewater. Title 22 requires that for spray irrigation of food crops, parks, playgrounds, schoolyards, and other areas of public access, wastewater be adequately disinfected, oxidized, coagulated, clarified, and filtered and that the effluent total coliform levels not exceed 2.2 MPN/100 ml as a 7-day median. Although a limit for fecal coliform and turbidity has been required in the permit that are analogous to Title 22 standards, EPA is not including effluent limits in the permit to demonstrate full compliance with California Title 22 disinfection standards.

*Total Residual Chlorine:*

Chlorine will not be used to disinfect WWTP effluent which is disinfected through the use of filtration and UV disinfection. Chlorine will be added to recycled effluent immediately prior to storage in the recycle water storage tanks. This water will not be discharged. Therefore, there is no reasonable potential for chlorine residual to be present in the effluent and no limitations have been included in this permit.

*Dissolved oxygen*

The basin plan contains the requirement that dissolved oxygen not be reduced below 7.0 mg/L based on COLD and SPWN beneficial uses. Therefore, this is included in the permit.

*Oil and Grease*

Treated and untreated domestic wastewater may contain levels of oil and grease which may be toxic to aquatic organisms. There are no numeric water quality standards for oil and grease. Therefore, an effluent limit based on Best Professional Judgment is being established. Therefore, this is included in the permit.

*Toxicity:*

The basin plan includes that language that “All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal or aquatic life.” Therefore, the permit requires yearly monitoring for toxicity based on Whole Effluent Toxicity Procedures to assess the reasonable potential of the discharge to have toxic effects on aquatic organisms.

3. Narrative water quality standards:

The following narrative water quality standards contained in the permit are based upon water quality objectives contained in the Basin Plan.

The discharge shall not cause the following in downstream waters:

1. The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, to exceed a geometric mean of 200 MPN/100 mg/L or cause more than 10 percent of total samples taken during any 30-day period to exceed 400 MPN/100 mg/L.
2. Biostimulatory substances that promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
3. Esthetically undesirable discoloration.

4. Concentrations of dissolved oxygen to fall below 7.0 mg/L. The monthly median of the mean daily dissolved oxygen concentration shall not fall below 85 percent of saturation in the main water mass, and the 95th percentile concentration shall not fall below 75 percent of saturation.
5. Floating material to be present in amounts that cause nuisance or adversely affect beneficial uses.
6. Oils, greases, waxes, or other materials to accumulate in concentrations that cause nuisance, result in a visible film or coating on the water surface or on objects in the water, or otherwise adversely affect beneficial uses.
7. The ambient pH to fall below 6.5, exceed 8.5, or change by more than 0.5 units. A one-month averaging period may be applied when calculating the pH change of 0.5 units.
8. Radionuclides to be present in concentrations that harm human, plant, animal or aquatic life; or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
9. Deposition of material that causes nuisance or adversely affects beneficial uses.
10. Taste- or odor-producing substances to impart undesirable tastes or odors to domestic or municipal water supplies or to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.
11. The ambient temperature to increase more than 5 EF.
12. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.
13. The turbidity to increase as follows:
  - a. More than 1 Nephelometric Turbidity Units (NTUs) where natural turbidity is between 0 and 5 NTUs.
  - b. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
  - c. More than 10 NTUs where natural turbidity is between 50 and 100 NTUs.
  - d. More than 10 percent where natural turbidity is greater than 100 NTUs.When wastewater is treated to a tertiary level (including coagulation) or equivalent, a one-month averaging period may be used when determining compliance with Receiving Water Limitation E.13.a.

14. Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.

## **VII. Monitoring Requirements**

### **1. Priority Pollutants**

The discharger must conduct a comprehensive screening test for the Priority Toxic Pollutants listed for the California Toxics Rule in the Code of Federal Regulations (CFR) at 40 CFR Section 131.38, within 90 days of discharge from the new treatment plant, and in the 3rd and 5th years of the permit. If an exceedance of a criteria, or a reasonable potential for exceedance of a criteria is detected the permit may be re- opened to require appropriate limits.

### **2. Whole Effluent Toxicity**

The permit establishes tests for toxicity for both acute and chronic.

Chronic toxicity testing evaluates reduced growth/reproduction at 100 percent effluent. Chronic toxicity is to be reported based on the No Observed Effect Concentration (NOEC). The permittee shall conduct short-term tests with the water flea, *Ceriodaphnia dubia* (survival and reproduction test), the fathead minnow, *Pimephales promelas* (larval survival and growth test) and the green alga, *Raphidocelis subcapitata* (growth test). The presence of chronic toxicity shall be estimated as specified by the methods in the 40 CFR Part 136 as amended on November 19, 2002.

## **VIII. Special Conditions**

### **1. Erosion Control**

The Permittee shall implement best management practices to safeguard against erosion from the discharge and prevent adverse impact to adjacent wetlands.

### **2. Pretreatment Requirements**

As described above, there are no industrial facilities discharging to the WWTP. Therefore, there are no pretreatment requirements in this permit.

### **3. Re-use Standards**

The Rancheria will re-use wastewater for on-site irrigation and non-potable water uses such as

toilet flushing. Therefore, the Tribe has agreed to follow the reclamation criteria established by the California Department of Health Services to protect public health and the environment. The California Department of Health Services (DHS) has established statewide reclamation criteria in Chapter 3, Division 4, Title 22, California Code of Regulations (CCR), Section 60304, et seq. (Hereafter Title 22) for the use of reclaimed water. These requirements implement the reclamation criteria in Title 22.

Although the Tribe is not required to comply with these State criteria, the Tribe has agreed to follow criteria for the re-use of its wastewater, and these terms are therefore included in the permit.

## **IX. Threatened and Endangered Species**

EPA reviewed the List of Listed, Proposed and Candidate Species that occur in Amador County and specifically in Ione Quad (No. 494C) which can be found on the web site of the Sacramento Office of the Fish and Wildlife Service.

EPA used this list along with the document prepared for the TEIR, “Biological Resource Assessment for the 67 acre Buena Vista Rancheria Project” (North Fork Associates, September 26, 2005) to determine whether the discharge would affect any endangered species or habitat. The Candidate Species list indicated that the following 10 non-plant Threatened and Endangered Species are present in Amador County, 5 of which are listed specifically for Ione Quad.

Invertebrates *Branchinecta lynchi* - Critical habitat, vernal pool fairy shrimp (X), *Branchinecta lynchi* - vernal pool fairy shrimp (T), *Desmocerus californicus dimorphus* - valley elderberry longhorn beetle (T), *Lepidurus packardi* - Critical habitat, vernal pool tadpole shrimp (X), *Lepidurus packardi* - vernal pool tadpole shrimp (E)

Reptiles *Thamnophis gigas* - giant garter snake (T)

Birds *Haliaeetus leucocephalus* - bald eagle (T)

Fish *Oncorhynchus mykiss* - Central Valley steelhead (T)

Amphibians *Ambystoma californiense* - California tiger salamander (T), *Rana aurora draytonii* - California red-legged frog (T)

Of the 5 invertebrates listed, 4 are found in vernal pools and the remaining one is not waterborne; therefore none have any nexus with Jackson Creek beyond speculative incidental contact. The one reptile listed does not have any nexus with Jackson Creek beyond speculative incidental contact. The one bird listed does not have any nexus with Jackson Creek beyond speculative incidental contact. The one fish species listed, the Central Valley steelhead has historical

spawning habitat may have included Jackson Creek. Steelheads are known to migrate through waterbodies downstream of Jackson Creek. SPWN and MIGR beneficial uses are recognized as beneficial uses for Jackson Creek in the permit, and the permit contains effluent limitations to protect these beneficial uses. Therefore, the discharge is not expected to have a negative effect on the migration or spawning of steelhead.

The 2 amphibians listed were the California tiger salamander and California red-legged frog. The “Biological Resource Assessment for the 67-acre Buena Vista Rancheria Project” (September 26, 2005) concluded that neither of these species were observed during surveys and that wetland areas on-site are not likely to support breeding populations.

This permit authorizes the discharge of tertiary treated sanitary wastewater into unnamed tributaries to Jackson Creek which, as outlined above, is not habitat for most the aforementioned threatened and endangered species. The draft permit contains provisions for monitoring conventional pollutants, toxic chemicals, and nonconventional pollutants in compliance with Federal and the State Water Quality Control Plan for the Sacramento and San Joaquin River Basins to ensure an appropriate level of quality of water discharged by the facility. Re-opener clauses have been included should new information become available to indicate that the requirements of the permit need to be changed.

In considering all information available during the drafting of this permit, EPA believes that a No Effect determination is appropriate for this federal action. A copy of the draft fact sheet and permit will be forwarded to the Sacramento Field Office of the United States Fish and Wildlife Service for review and comment prior to and during the 30-day public review period.

#### **X. National Historic Preservation Act**

The permit does not allow the disturbance of any historic properties. The permittee has conducted archeological surveys to determine areas of historic interest and has established a boundary of construction that will not affect any historic areas. See “Archaeological Inventory of the Buena Vista Rancheria, Amador County, California”, Project Number 1550-01, October 2005 prepared by Pacific Legacy, Inc.

#### **XI. Permit Reopener**

The permit contains a reopener clause to allow for modification of the permit if reasonable potential is demonstrated during the life of the permit.

#### **XII. Standard Conditions**

Conditions applicable to all NPDES permits are included in accordance with 40 CFR, Part 122.

#### **XIII. Administrative Information**

#### Public Notice

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to an NPDES permit or application. The basic intent of this requirement is to ensure that all interested parties have an opportunity to comment on significant actions of the permitting agency with respect to a permit application or permit. This permit will be public noticed in a local newspaper after a pre-notice review by the applicant and other affected agencies.

#### Public Comment Period

Rules require that permits be public noticed in a newspaper of general circulation within the area affected by the facility or activity and provide a minimum of 30 calendar days for interested parties to respond in writing to EPA. After the closing of the public comment period, EPA is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

#### Public Hearing

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if the Director determines there is a significant amount of interest expressed during the 30-day public comment period, or if significant new issues arise that were not considered during the permitting process.

### **XIV. Additional Information**

Additional information relating to this proposed permit may be obtained from the following locations:

U.S. Environmental Protection Agency, Region IX  
CWA Standards & Permits Office Mail Code: WTR-5  
75 Hawthorne Street  
San Francisco, California 94105-3901  
Telephone: (415) 972-3518  
Attn: John Tinger

### **XV. Information Sources**

While developing effluent limitations, monitoring requirements and special conditions for the draft permit, the following information sources were used:

1. Water Quality Control Plan for the State of California, Region 5, Water Quality Control Board, December 4, 1994.
2. EPA Technical Support Document for Water Quality-based Toxics Control dated March 1991.
3. U.S. EPA NPDES Basic Permit Writers Manual (December 1996).
4. 40 CFR Parts 122, 131, and 133.
5. Interim Final Regions 9 and 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs, May 31, 1996.
6. Permittee submittals to EPA dated May, 2005 (NPDES permit application), July 28, 2005 (email), conversations, and a site visit conducted by EPA staff on April 8, 2005.
7. Archaeological Inventory of the Buena Vista Rancheria, Amador County, California, Project Number 1550-01, October 2005 prepared by Pacific Legacy, Inc.
8. Biological Resource Assessment for the 67 acre Buena Vista Rancheria Project, prepared by North Fork Associates, September 26, 2005.
9. Final Tribal Environmental Impact Report, State Clearinghouse # 2005012029, October, 2005.